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ON

VESICO-VAGINAL FISTULA:

AND ITS SUCCESSFUL TREATMENT.

Illustrated by Eleven Cases.

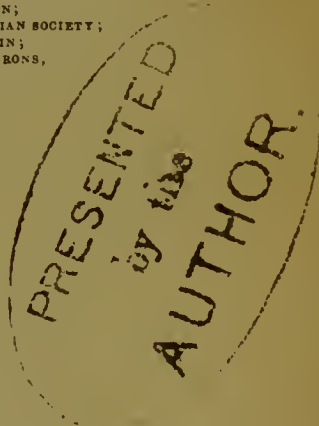
READ BEFORE THE BRITISH MEDICAL ASSOCIATION
AT EDINBURGH, JULY 31st, 1858.

BY

I. BAKER BROWN, F.R.C.S.

(BY EXAM.)

SURGEON-ACCOCHEUR TO, AND LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND
CHILDREN AT, ST. MART'S HOSPITAL;
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FELLOW OF THE EPIDEMIOLOGICAL SOCIETY; MEMBER OF THE HANOVERIAN SOCIETY;
CORRESPONDING FELLOW OF THE OBSTETRIC SOCIETY, BERLIN;
HONORARY FELLOW OF THE GENERAL ASSOCIATION OF SURGEONS,
NORTHERN GERMANY; ETC. ETC.



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Dedication.

TO

DR. BOZEMAN,

MONTGOMERY, ALABAMA,

UNITED STATES.

MY DEAR DR. BOZEMAN,

I dedicate this little pamphlet to you, to show how highly I appreciate your great surgical skill, in having brought the operation for Vesico-Vaginal Fistula to the highest perfection; and also as a slight proof how much I esteem you personally, as an earnest worker in the path of true scientific surgery, as well as a warm, earnest, true-hearted friend.

Believe me,

My dear Dr. BOZEMAN,

Your faithful Friend,

I. BAKER BROWN.

17, CONNAUGHT SQUARE, HYDE PARK,
LONDON, *August*, 1858.

VESICO-VAGINAL FISTULA.

IN my work on "Surgical Diseases of Women," pp. 99 to 111, I have very fully described the nature and treatment of this hitherto most intractable lesion. Since the publication of that work much valuable and really practical improvement has taken place, founded upon the suggestion of Dr. Marion Simms, that silver wire was the best form of suture for this troublesome injury. This improvement is due to Dr. Boze-man, of Montgomery, Alabama, U.S., and was fully described by him two years since, in a little pamphlet which he did me the honour to send me. I immediately adopted his plan, and cured the first case upon which I tried it. This case I published in the *Lancet* (see page 540, November 15th, 1856), giving at the same time a full description of the operation, and plates of the instruments used.

In order, however, that it may be better understood and appreciated by those who did not see it at the time, I shall very briefly introduce it here. The patient being put under the influence of chloroform, and placed in the usual lithotomy position, or in any other which may best conduce to a perfect sight of the parts,* the edges of the fistula are carefully and evenly pared, and the mucous membrane removed. A sufficient number of silver wire sutures eighteen inches long are then passed by a needle held by a port-aiguille in the method shown in Fig. 1. The two ends of each wire are then brought

* Dr. Boze-man himself prefers the patient being upon her hands and knees, and not under the influence of chloroform. However, I consider the posture to be quite immaterial, and (as the succeeding cases will prove) the patient may be placed almost in any position by which a good view of the opening can be secured. If under chloroform, the lithotomy position is the best one; and conversely, if *not* under chloroform, that on the hands and knees is the best.

together by an instrument represented in Fig. 2, leaving the parts in apposition as in Fig. 3. A metal button is then passed over the end of each double suture as in Fig. 4, and a perforated shot passed over each wire as in Fig. 5, pressed down upon the button, and then firmly squeezed together with a pair of long strong forceps. The wires are then cut off close to the shot, leaving the parts as shown in Fig. 6. A piece of lint dipped in oil is then put into the vagina, the patient placed on her side in bed upon a water cushion, and a bent catheter, with a bag attached to it, is introduced into the bladder. I originally used silver buttons, but now leaden ones, which I cut to any size or shape at the time of the operation, in order to meet the peculiarities of the individual case, as suggested by Dr. Bozeman. Shortly after this, Dr. Wallace, of Greenock, was induced by me to adopt it in a case, which was afterwards published by him. (Case of Vesico-Vaginal Fistula successfully Treated by Bozeman's Operation, *Glasgow Medical Journal*, April 1857.)

A few months since, I published three more cases, two of which were cured by Dr. Bozeman's plan, and one by that of Dr. Hayward, of Boston (*Medical Times and Gazette*, vol. xxxvii., p. 398, April 17th, 1858); and now within a few weeks I have succeeded in curing seven more, and all by Dr. Bozeman's method. I therefore think it due to the profession, to place these facts before them, and in doing so, I claim no merit beyond that of having been the first to adopt and successfully carry out Simm's and Bozeman's suggestions. I cannot resist adding, that I believe this terrible condition of suffering women will be for the future as successfully treated by operation, as that other serious lesion, ruptured perineum, has been. I speak confidently, because I have hitherto been as unsuccessful in my operations for vesico-vaginal fistula, as I have been successful in ruptured perineum.*

CASE I.—Deborah P., aged twenty-two, was admitted under my care in St. Mary's Hospital, September 22nd, 1856. She

* I have operated for ruptured perineum sixty-one times, and fifty-seven of these have been completely cured.

Fig. 1

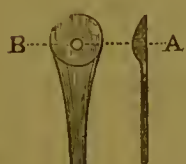
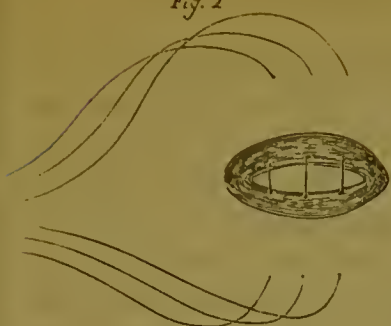


Fig. 2

Fig. 3



A

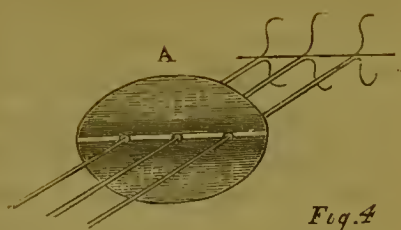


Fig. 4

B

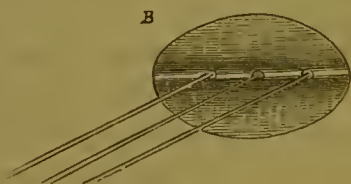


Fig. 5



Fig. 6



stated that she was delivered of a still-born male child, on July 15th, with instruments, after being forty-eight hours in labour. Eight days after delivery she discovered that the urine all dribbled away, after which it all seemed "to pass by the wrong passage." Upon examination, I discovered a fistulous opening close up to the os uteri, about the size of an ordinary director, which instrument would easily pass from the vagina into the bladder. It appeared that all the urine passed through this opening and none through the urethra; in fact, that she was never able to retain any in the bladder even for a short time. After attending to her general health a little, on October 15th I performed Bozeman's operation, using a silver button with three holes. I then plugged the vagina with oiled lint, and introduced the bent catheter, with bag attached, into the bladder. Two grains of opium were given immediately, and a grain every six hours; she was allowed wine and a generous diet.

She went on well, and no urine escaped, and on October 24th I removed the button and sutures, and found most perfect union had taken place throughout the whole extent.

26th.—The bowels were moved with castor oil and an enema, and the catheter removed for three hours, at the end of which time she passed urine comfortably, with no escape per vaginam.

27th.—Catheter entirely removed.

28th.—Was up and about all day.

November 8th.—Perfectly cured. After a most careful examination I found all the parts firmly united, and no tendency to the slightest escape of urine, even after a long and tedious investigation.

CASE II.—Mrs. K., aged twenty-two. I was called to see this lady by Mr. Kisch, who gave the following history:—About six weeks ago she was confined of her first child. The labour was very long and tedious, and the head remained in the pelvis for many hours without making any progress whatever, so at last the forceps were applied, and after a good deal of difficulty she was delivered. She progressed

without any unfavourable symptom till the sixth day, when she perceived that her urine was constantly escaping without her being in any way conscious of it, and that it did so in all postures equally. This continued without alteration, although her general health rapidly improved, and she was able to sit up in perfect comfort, in every other respect, at the usual period.

Upon examination, it was discovered that there was an opening which would admit a middle-sized bougie, situated just at the junction of the bladder with the urethra.

The edges had not become at all callous, but were soft and yielding. Every drop of the urine escaped through the fistula.

February 2nd, 1858.—I proceeded to operate, assisted by Dr. Priestley and Messrs. Kisch, Nunn, and Philip H. Harper. The patient was placed in the usual lithotomy position, and a full-sized wood bougie being introduced into the bladder through the urethra, so as to raise the fistulous opening well into sight, and to give a little support while the edges were being pared, I proceeded to split up the coats of the bladder, first dissecting a narrow strip of mucous membrane from the circumference of the fistulous opening, and turned the so dissected edges, without removing them, back into the fistula—thus obtaining a raw surface. Having done this, I inserted three double silk sutures at regular intervals through the split surfaces, and then tied them over two pieces of fine elastic bougie, about an inch in length, thus bringing the two raw surfaces into close, equal, and exact apposition; and by careful manipulation no portion of mucous membrane was allowed to get between. The parts were then covered with dry lint, and the usual bent catheter, with an india-rubber bag attached, introduced and left in the bladder.

Two grains of opium were given as soon as the effects of chloroform had a little subsided. The patient continued nursing her baby.

On February 8th I found that the sutures had cut themselves out: when I syringed the vagina, which I did every day, they came away in the basin. There had been not the

slightest escape of urine up to this day: she was therefore allowed to leave off the catheter. In four days—viz., the 12th—she was allowed to pass the urine herself every three hours. In two days she found she could go five, six, or eight hours at night, and then pass it naturally, none escaping involuntarily; but on beginning to dress or to suckle the child, some escaped from the urethra, which seemed to have partially lost its controlling power. On carefully watching the parts where the fistula was, and requesting her to cough, I could see a drop or two percolate through the united surfaces, just like the escape of perspiration from the pores of the skin. I applied caustic to this part, as the mucous membrane of the vagina had not yet covered over the parts operated on.

Thursday, 18th.—The nurse saw a small escape from the vagina; but from that time till the 22nd, there had been no escape, except occasionally in the day a drop from the urethra, although the patient walked about the room.

March 2nd.—There has been no escape, and on a most careful examination, I found there was no sign of an opening, and indeed the vaginal mucous membrane had completely covered over the parts, so as to leave no trace of the fistula. She walks about, up and down stairs, and the urethra has perfectly recovered its normal action.

Remarks.—This is a case of great interest, and offers some practical points for observation.

1. It will be noticed that the first operation succeeded: a rare occurrence in this most serious lesion.

2. The sutures were not removed, but were allowed to cut themselves out, after the plan recommended by Mr. Hayward, of Boston, United States.

3. The operation was performed only a few weeks after the lesion was discovered, and before the edges were callous or much inverted—a point I believe of the greatest importance; and I laid great stress on it when first consulted, and would not allow even the nursing of the infant to delay the operation.

The wretched condition of any patient suffering from this lesion is at all times one of the most distressing and loath-

some kind; and in this case, where the young wife was of a lively temperament, clever, cheerful, and fond of society, it was peculiarly trying and sad, and threatened to break even her high and buoyant spirits.

CASE III.—Elizabeth Tranter, aged thirty-six, from Cirencester, was admitted into Boynton Ward, in February, 1855, and gave the following history:—In November, 1854, she was taken in labour (first pregnancy), and after forty-eight hours, instruments were used, and she was delivered of a still-born child. She went on pretty well until about the ninth day, when a good deal of pain in micturition came on, and she continued in great pain throughout the next three days, when suddenly, on the twelfth day, she felt something give way, her urine escaped through the opening, and she became quite easy. From that period all her urine escaped in this way. On examination per vaginam I found a large opening extending transversely completely across the centre of the bladder, and so wide as to easily admit two fingers. The destruction of tissue was so great, and the fistula so gaping, as to render any present attempt at closing it quite out of the question. I therefore determined to adopt a plan recommended by Jobert de Lamballe—viz., to dissect the neck of the bladder from the pubis and its descending rami, thus allowing the anterior half of the bladder to fall backwards, and by so doing, relax the fistula. Great success followed this operation, and in April, 1855, I pared the edges and brought them together by Simm's mode of treatment. But little success followed the operation, and she was allowed to return into the country for the improvement of her general health; and in April, 1856, she was delivered of a living child.

On December 19th, 1856, she was again admitted into Boynton Ward, and I performed Bozeman's operation, with the result of closing eight-tenths of the opening.

In five weeks I again operated, with but little success, as great sickness always followed the use of chloroform. So in three days I again operated without chloroform, and the re-

sult was the closing of a third of the fistula. After this she returned into the country.

December 7th, 1857.—She was again admitted, and I performed Bozeman's operation; with the result of a further reduction in size of the fistulous opening. She then went again into the country.

On February 15th, 1858, she was admitted into the Boynton Ward, and stated that since the last operation she had been able to retain the urine during the night, and some even during the day, whilst she was sitting quite still.

17th.—I carefully denuded the edges of the fistula, and slit up the coats of the bladder all round, and then brought the raw surfaces together by silk sutures and quills.

20th.—She felt the sutures give way, and the urine make its escape.

24th.—She was taken into the operating theatre for the ninth time, and without chloroform I revived the edges, and passing three silver wire sutures, closed them down with Bozeman's button.

25th.—No escape.

26th.—No escape. Some headache, and slight pain in the vagina.

27th.—Nurse thinks a little urine escaped last night and again this morning; but I examined, and found that it evidently came from the urethra; the sphincter having relaxed from the presence of the catheter.

March 4th.—Bowels are well moved; no escape of urine; catheter removed.

6th.—The button was removed, and the whole opening was found beautifully closed, and quite firm.

10th.—On most careful examination the fistula was found quite closed, and she can pass or retain her urine as well as she ever could before the lesion, and is consequently in good spirits and very grateful.

Remarks.—This case is so interesting as to require but little comment. It will be observed that she was three years

under treatment, and I performed nine operations upon her from first to last. The result is a good encouragement to persevere in these most difficult lesions.

CASE IV.—Mrs. N., Rotherhithe, aged twenty-eight, consulted me in March, 1858, and gave me the following history:—"Four years and a quarter since was in labour of her first child from Wednesday evening till Sunday morning, when Mr. Peete was called in, and delivered her with forceps of a still-born child. Directly after she was made comfortable in bed she found the urine escape through the vagina, and from that time it has always passed involuntarily except when lying on her back. Three months after the accident she went into Guy's Hospital, and was there for nine weeks. She then went to a hospital for diseases of women, and was there recommended a large blister to be put on her back, so as to make a sore; but as her husband thought such a remedy could not heal the hole in her bladder she did not apply it, and left off attending the hospital. Mr. Peete had repeatedly advised her to see me."

On examination, I found a small fistulous opening at the fundus of the bladder, close up to the os uteri, which was also much torn. The fistulous opening was about the size of an ordinary pocket-case director.

On March 3rd I proceeded to operate, assisted by Messrs. Nunn, Peete, Philip H. Harper, and my son, Arthur Brown. Placing her on her knees and face, without chloroform, I carefully pared the edges, removing as little mucous membrane as possible, and then performed Bozeman's operation; but instead of bringing the edges together transversely, as usual, I brought them together horizontally. The bent catheter, with bag attached, was then introduced, and opium given.

4th.—No urine has escaped.

6th.—All well, except sickness caused by the opium, which is therefore discontinued.

7th.—No escape; bowels opened by an enema.

9th.—Still sick. A dose of calomel, followed by a Seidlitz powder.

11th.—Quite well. No sickness and no escape.

13th.—I removed the button to-day, and found the opening perfectly and entirely healed.

This case is quite a contrast to the preceding one, and is another of the rare cases in which one operation succeeds. It is altogether most satisfactory and pleasing.

From Notes by the Clinical Clerk, MR. CHISHOLM.

CASE V.—Ellen Welch, aged twenty-five. Admitted into Boynton Ward, March 26th, 1858. She is married. Six weeks ago she was in labour with her first child, when she sent for a midwife. She was in labour fifty-two hours with good pains, and finally was delivered by a surgeon with instruments. A fortnight after she noticed that she could not retain her urine, which was constantly dribbling away, in greater quantity when she stood up, than when she was in the recumbent or sitting posture. When admitted, Mr. Brown removed a large slough, which was to be seen protruding from the vulva.

Upon making an examination with the speculum, it was found that the lesion was far up in the vagina, just anterior to the os uteri, where a transverse fissure, about half an inch long, was to be seen, having a white appearance, indicating that a slough had yet to come away.

March 27th.—The perineum had not been torn, and in order to facilitate the intended operation, Mr. Brown made an incision downwards and obliquely to the right side, through the posterior wall of the vagina; it was dressed with oiled lint.

Ordinary diet: milk one pint, porter one pint.

28th.—The margins of the incision have thrown out lymph. To be dressed daily with oiled lint.

April 7th.—Has lost all pain, and the incision has almost healed.

10th.—The incision has quite healed, but the os uteri is still much abraded.

21st.—Mr. Brown performed Bozeman's operation to-day, using a leaden button instead of the silver one.

Pil. opii, gr. ii. statim.

Pil. opii, gr. i. quarta hora.

22nd.—Not much sleep last night, but no pain.

23rd.—A good deal of hæmorrhage making its escape through the urethra.

Acid. gallic., grs. v. ter die.

24th.—A good deal of blood passed from the bladder last night, mixed with mucus, which stopped up the catheter. The liquid was of a dark colour and tenacious. A sharp pain across the symphysis pubis; but this pain has now left, and the secretion of mucus is not so great.

Omit the acid. gallic.

25th.—The bloody condition of urine has disappeared. It appears, however, to escape from the fistula.

26th.—Yesterday the sister removed the catheter; the secretion of mucus has ceased.

27th.—The catheter again replaced.

Ol. ricini, half an ounce.

30th.—As the bowels have not opened since she last took oil, she is to repeat it.

May 1st.—Mr. Brown removed the shot and button to-day, and found that the fistulous opening had entirely healed. The escape which was supposed to have taken place the other day, must have oozed out by the side of the catheter. For the last three or four days she has been able to retain her urine and pass it naturally, the catheter not being requisite. Nearly a pint of urine has been voided at a time. Two of the sutures were at the same time taken away.

6th.—Got up yesterday for the first time.

14th.—Discharged quite cured. Able to retain or void her urine at pleasure.

Remarks.—The object with which I enlarged the vaginal opening in this case, was to get a better view of the parts. The pelvis was so deep, and the fistula so high up, that I felt it would be far more beneficial to enlarge the vagina if possible, and by making the incision obliquely I ran no risk of

ultimately interfering with the sphincters, whilst my intended operations were much facilitated. It was again an advantage, that I was able to operate in this ease so soon as the sloughs which formed the fistula had separated. The parts were thus in a favourable state. The hæmorrhage which ensued on the second day made me dread lest the parts should not unite, but by controlling it with gallie acid, it seemed to have no detrimental effect beyond lengthening her convalescence somewhat.

CASE VI.—Margaret Dancer, aged twenty-six, was admitted into the Boynton Ward, under the care of Mr. Brown, May 15th, 1858.

In March last was taken in labour with her first child, and after a continuance of three days and nights, was delivered of a still-born male child, without the use of instruments. Her urine was drawn off for two days after delivery, as she was not able to void it herself, and after that period it dribbled away from her as she lay in bed.

Upon examination it was found that there was a transverse opening about an inch long, situated at the neck of the bladder.

After the usual preparation, she was, on May 19th, operated upon by Mr. Baker Brown, who performed Bozeman's operation, closing the opening with three silver sutures and leaden button. After the operation, the usual catheter and bag was placed in the bladder. Pil. opii, grs. ii. statim, and pil. opii, gr. i. every four hours; simple diet. Beef jelly, pint i., and wine, ziv .

20th.—Had no sleep at all last night, and complains of being in pain; was very sick after the chloroform. Soda water.

21st.—It is reported that a small quantity of urine makes its escape.

22nd.—Sister says that when she passed the catheter this morning about half a pint of urine was drawn off, showing that the parts have nearly, if not quite, healed.

24th.—This morning sister again drew off half a pint of urine.

29th.—To-day Mr. Brown removed the button and silver wires.

June 1st.—Pint of milk and one pint of porter. Complains of a good deal of pain.

4th.—She gives a history of hæmorrhoids, but upon the resident surgeon-accoucheur, Mr. Talbot, examining her, he found the uterus large and pressing upon the rectum, but nothing in the shape of hæmorrhoids. She is a great deal better to-day.

7th.—She got up yesterday a short time, and is up again to-day.

8th.—She was carefully examined to-day by Mr. Brown, in the presence of Mr. Talbot and others, and he found that the whole of the opening had healed, with the exception of a small portion which would admit the point of an ordinary director.

13th.—States that her urine is constantly dribbling away, and she is not able to retain any in the bladder.

16th.—After the usual preparatory treatment, she was again operated upon. Mr. Brown used three sutures and a leaden button, and by them brought the parts well in apposition; when removed back to the ward, the usual catheter was introduced and the opium given.

18th.—Doing well; has had no escape or any sickness.

She went on well, and on June 26th Mr. Brown removed the button and sutures. He found the parts firmly healed, and no trace of any fistula remaining. Dr. Bozeman and other gentlemen were present, and were satisfied that the cure was complete.

July 7th.—Discharged cured. Whilst in the erect position some drops of urine escape from the meatus urinarius, which was itself torn at the mouth, probably by the catheter; should she not recover in a few weeks, I propose closing the tear by a silver suture.

Remarks.—The opening in this case was a large one, and I fancied at the time it might have been better to have inserted four sutures, but as the three appeared to close it evenly, I was content. However, the chloroform made her

very sick, and probably the efforts then made forced a drop of urine between the edges of the fistula. The success was great in closing so nearly, at the first operation, so large an opening. I have not heard from her since she was discharged; it is fair to conclude, therefore, that the slight enlargement at the mouth of the meatus has contracted, and that she is now perfectly recovered even from that slight annoyance.

CASE VII.—A. T., aged twenty-five, married, was taken in labour on February 24th, 1857, and the pains remained very severe indeed until 2.30 P.M. on February 28th, when the head of the child was born, but it was 7.30 P.M. before the body could be delivered. During this period the catheter was attempted to be used several times, but unsuccessfully. She herself is a small woman, with an average pelvis, but the child was a very large one. It was born alive, but lived only two days. After the child was born she remained in very severe pain in the vagina, and the next day passed her urine much mixed with blood. This continued for a fortnight, when the urine was retained, and she could not pass any for twenty-four hours. On being lifted out of bed it gushed forth, and from that time has always come away without her knowledge. She cannot retain the smallest quantity either when sitting up or lying down.

She was recommended by Mr. Bermingham to apply to me, and was admitted into "The London Home" for Surgical Diseases of Women on June 9th, 1858.*

She stated that she had another child on February 25th, 1858, without any increased effect upon the parts.

* "The London Home" for Surgical Diseases of Women, No. 16, Stanley Terrace, Notting Hill, affords medical and surgical treatment, skilled nursing, and domestic comfort, to respectable females suffering from surgical diseases peculiar to their sex. The advantages are offered to those who are in better circumstances than the ordinary hospital patients, but cannot afford to obtain the necessary attendance and treatment at their own homes. The terms of admission vary from 10s. to 40s. per week, according to the accommodation required; and this charge covers all expense of board, lodging, medical and surgical treatment.

On examination, an opening was found to exist which would admit easily a couple of fingers, extending obliquely across the bladder, and involving the anterior lip of the os uteri. The circumference of the opening was smooth, and not much thickened. There was also a slight tendency to prolapsus of the anterior wall of the vagina. The vagina itself was soft, and easily dilatable. The internal coat of the bladder was healthy. She was ordered an aperient medicine, and on June 10th I performed Bozeman's operation. The opening was so extensive as to require a leaden button with eight holes; and some of the sutures were inserted through the anterior lip of the os itself. There were present at the operation Messrs. Nunn and Philip H. Harper, Dr. Norton, Messrs. Bermingham, Wratishaw, Hubbard, Giles, and my son, Arthur Brown. After the operation, the bent catheter, with attached bag, was introduced, and two grains of opium given. She was to have a grain of opium every four hours, and nourishing diet.

June 11th.—Chloroform has not produced sickness, and she is very comfortable.

She went on very well, suffering no pain and having no escape of urine; and on June 22nd I removed the button and sutures in the presence of Dr. Bozeman of Montgomery, Dr. Hayward of Boston, and Messrs. Nunn, Philip H. Harper, and Wratishaw. The opening was firmly healed. Not a trace of fistula remained.

29th.—She was discharged quite well, able to hold her water as long as she pleased, and having no difficulty in emptying the bladder. She herself compared it to being in a dream. She could hardly realize the fact of being perfectly cured with so little suffering.

Remarks.—This is a beautiful case; and the opening was the largest one I have yet been called upon to treat. The operation was facilitated by the very dilatable state of her vagina. The size of the opening had prevented the edges becoming much hardened, which also was somewhat in her favour. I have since received a letter from Dr. Hall Davies (who had frequently seen her before she came under my care,

and expressed his doubts about its being possible to cure her), in which he expresses his great pleasure at the perfect success of the operation, and offers me his warmest congratulations.

CASE VIII.—M. A. S., aged thirty-five, married, the wife of a missionary in India, was confined of her first child in April, 1855, after a tedious labour of three days. She quite recovered, became pregnant again, was taken in labour on the 10th April, 1857, had heavy pains until the 12th, when forceps were used, and she was delivered of a large male child. She went on well for three days, passing her urine naturally, and having no unfavourable symptom. She then had great pain in the vagina come on, which became much swollen. She was fomented. On the sixth day after the labour her urine began to escape without her knowledge, and a few days subsequently a large slough escaped from the vagina. For some weeks she could not have her bed made, but she gradually recovered her health, without having, however, the slightest control over her urine; it escapes in all postures alike. In September, 1857, she consulted me, and I performed an operation upon her, but from the tender and contracted state of the vagina and the peculiar situation of the opening, I was only able to close a portion of it.

She was admitted into "The London Home" on June 11th, 1858. On examination, I found that the opening now was large enough to admit a finger, and situated so close to the anterior lip of the os uteri as to involve it. From the cicatrization of the walls of the vagina the opening was drawn as it were into a sulcus, rendering it very difficult to get at. Her general health was good.

June 12th.—She was placed under chloroform, and I proceeded to perform Bozeman's operation. I was obliged to pare a portion of the os itself, and had great difficulty in passing the needles through, both on account of the hardness of the os, and the depth at which the opening was situated. However, I inserted five silver wire sutures, and putting on a leaden button got the edges into good apposition. There were

present Drs. Priestley and Norton, Messrs. Nunn, Philip H. Harper, Wratislaw, Speneer, Hubbard, Giles, and my son, Arthur Brown. She had opium after the operation, as usual.

June 13th.—Good deal of sickness, but otherwise comfortable. She went on well and had no escape, and on June 24th I removed the button and wires in the presence of Dr. Boze-man, and Messrs. Nunn, Philip H. Harper, and Wratislaw. There was some little difficulty in expanding the vagina sufficiently. A small quantity of urine escaped out of the urethra and flowed into the vagina, thus appearing as though it escaped out of the fistula. However, I thought it better not to examine minutely, so I replaced her in bed, and introduced the bent catheter again, and left it in the bladder.

26th.—I examined more minutely, and removed the sutures. I found that the whole opening had healed and was firmly united.

July 7th.—I removed the three last sutures and found everything well and sound, and she is up and about quite well.

Remarks.—I had great difficulty in dealing with this case, owing to the cicatrization of the vagina having drawn the fistula out of reach to a great extent. It will be noticed that I passed some of the sutures through the os itself, but beyond the difficulty of pushing the needle through, this does not alter the character or progress of the case.

CASE IX.—C. G., aged thirty-three, was admitted into St. Mary's Hospital on June 28th, 1858. She has had four children, always with tedious labours, and twice requiring instruments. Her last labour began on Monday night, and she was delivered on Thursday morning by craniotomy. Eight days after delivery she perceived that her water dribbled away, and she has not been able to retain any since that day. It is now fifteen months since. She has been under various gentlemen, and has undergone several operations of one kind or other, including the actual cautery.

On examination, I found an opening which would admit the top of the little finger, at the upper part of the vagina,

close to the right side of the os uteri, through which the urine very freely escaped. The edges were tense and callous.

Having undergone the usual preparatory treatment, on June 30th I proceeded to operate. Dr. Hayward of Boston administered ether; Dr. Bozeman of Alabama, U. S., was also present. I pared the edges of the fistula in a longitudinal instead of a transverse direction, on account of its position; and from its close proximity to the os I was compelled to pare this also. I inserted four silver wire sutures, one of which I passed through the anterior lip of the os. I then put on the leaden button as usual.

The bent catheter, and bag attached, was introduced, and two grains of opium given immediately and one grain every four hours.

July 1st.—Has been sick once from the ether, but has had no nausea.

4th.—No escape: a little pain in the abdomen, caused by flatus.

6th.—Bowels opened last night. The catheter accidentally slipped out of the bladder during the night, and she retained about eight ounces of urine. The urethra being very tender the catheter is not to be worn constantly.

8th.—Passes her urine voluntarily and with little difficulty.

10th.—I removed the button and two of the sutures. The fistula is perfectly healed and is very sound. She retains her urine and passes it voluntarily. There is not a trace of the wound left; in short, she is perfectly cured. I have since heard from Mr. Edwards, who recommended her to be under my care, that she was pregnant at the time of the operation. She continues perfectly well.

CASE X.—Mrs. Me —, aged twenty-six, married, mother of three children. Her two first labours were rather tedious, but presented nothing remarkable. Five years since, whilst living in Ceylon, she was confined of her third child. The labour lasted for a couple of days before she sent for her medical attendant. He discovered that it was an arm pre-

sentation, and after several attempts succeeded in turning the child and delivering. Her urine escaped immediately after the labour was over, and has continued to do so ever since. She states that she suffered so much from swellings and pain in the vagina that it was nearly twelve months before she was able to sit up, at the end of that period she had an operation performed in Ceylon, which she describes as consisting "of cutting the opening and sewing it together;" she went on well until the fifth day, when the urine escaped. A few days after this sutures were again inserted, but the hæmorrhage was so free that the fistulous opening was only partially closed. The actual cautery was now used after every menstrual period. This treatment was continued for a year, when she came over to England for advice, and consulted me, but for various reasons did not come back that I might do anything for her. She consulted other gentlemen, who used the cautery and inserted sutures three times. Getting tired, she applied to another, who used the cautery, and whilst the edges were raw inserted sutures. He repeated this procedure, she believes, eight times, and succeeded in making the opening smaller, but not in healing it. She applied to "The London Home" on July 17th, 1858. She cannot retain any urine, either sitting up or lying down, and it is constantly running from her. On examination, an opening was found which would admit a full-sized bougie easily, situate in the base of the bladder, close up to the os uteri, but not involving it. The edges were rather callous, but not everted. The coats of the bladder were healthy; the vagina dilatable. There was a constricting band of cicatrix which extended from the lateral wall of the vagina to the edge of the opening.

After the usual preparatory treatment, she was placed under chloroform on July 19th, and I proceeded to perform the usual operation in the presence of Drs. Bozeman and Vinen, Messrs. Nunn, Philip H. Harper, Wratislaw, Spence, Hubbard, Giles, and Royston. I pared the edges freely, and as the opening was close up to the os, I was obliged to insert some of the sutures through the anterior lip, which required a good deal of force, as it was very hard. It required five

sutures, and the leaden button used was cut out a little on one side, so as not to compress the os. The bent catheter, and attached bag, was introduced into the bladder, and two grains of opium given immediately, and one grain every six hours afterwards.

July 20th.—Chloroform produced a great deal of sickness, which was subdued by effervescents, ice, &c.

July 27th.—Has had no escape whatever.

28th.—I removed the button to-day, in the presence of Dr. H. Bennett, and Messrs. Nunn, Philip H. Harper, and Hubbard, and found the fistula perfectly healed. The line of union is so perfect as scarcely to be recognisable except from the position of the sutures.

August 5th.—I removed the sutures, and found that the cure was quite complete. She can retain and pass her urine at pleasure.

*From Notes by Mr. TALBOT, Resident Obstetric
Medical Officer.*

CASE XI.—J. P., aged twenty. Admitted into St. Mary's Hospital, under Mr. Baker Brown, on October 14th, 1857.

Was delivered in March last by instruments, after a long and tedious labour, in the course of which violent convulsions came on. She suffered great pain as well as soreness in the vagina after the labour, and her urine escaped without her knowledge. She has not been able to get out of bed since.

On examination, there was found a fistulous opening into the bladder, which would admit three fingers, and the loss of structure was very great. In addition to this, the edges of the fistula were puckered up, and very tense, and it was drawn quite behind the arch of the pubis. Of course all the urine escaped involuntarily, and in all positions alike. Mr. Brown considered that it would be useless and impossible to do anything for the closure of the fissure until the parts could be placed in a more relaxed state, so as to allow the edges of the fistula to be brought into contact. Therefore, with this object in view, on October 24th he detached the urethra and neck of the bladder from their attachments to

the rami of the pubis. By this procedure the walls of the bladder, in which the opening was situated, were much relaxed. There was very little bleeding. The incisions were stuffed with oiled lint, and she was put into bed with a catheter introduced into the bladder. She recovered gradually from this operation, and Mr. Brown determined to attempt the healing of the fistula. On December 17th he therefore performed Bozeman's operation upon her, but the difficulty of getting to the parts was still very great. The urine appeared through the fistula again on the following day. Mr. Brown determined not to do anything more for her until she had been into the country for a few months, so as to improve her general health. She was therefore discharged on January 11th, 1858.

She was re-admitted on July 22nd, 1858, and stated that the inconvenience and distress were as bad as ever, and that no water could be retained in any posture.

On examination now, in the presence of Dr. Bozeman, it was found that the fistula was about an inch and a quarter in length, extending in an oblique manner from right to left, passing close to the os uteri, which was closed; and she had not menstruated since the accident occurred. One of the silver wire sutures used in the former operation was found lying bright and firm in the edges of the fistula, without occasioning any inconvenience. The orifice of the urethra was drawn back three quarters of an inch from its ordinary situation, as the effect of its detachment from the pubis in the first operation. General health good.

On July 27th she was placed under chloroform, and Mr. Brown proceeded to perform Bozeman's operation, but in the lithotomy position. Some difficulty was experienced, in consequence of the edge of the fistula by the os breaking down under the passage of the needle, and after many attempts the sutures were passed satisfactorily from before backwards. A small artery was wounded during the paring of the edges, but it was easily restrained by torsion. A leaden button was used which was slightly hollowed out, so as not to compress the os uteri. It required seven holes, as the opening was so

large as to require seven sutures. The operation occupied two hours and a half. On being placed in bed, the bent catheter, and attached bag, was introduced, and two grains of opium given, to be followed by a grain every four hours.

30th.—No escape. An offensive discharge from the vagina, for which she was ordered a lotion of chlorinated soda.

August 3rd.—No escape : going on very well.

4th.—Mr. Brown removed the button to-day, in the presence of Dr. Inglis of Perth, and his brother, Mr. Inglis, Mr. Talbot, and other gentlemen. The cure was quite perfect, and the line of union was not recognisable. She can hold her urine as long as she is allowed.

11th.—I removed the remaining sutures in the presence of Dr. Hennig of Leipsie, and others, and found the parts very sound and most satisfactorily healed.

These cases call for little remark. They prove what I stated in the beginning of the pamphlet, that this intractable lesion is now quite under our control. I am so satisfied of this that I am now operating upon cases which formerly I rejected as being incurable, and for whom I feared no operation would be of any avail. It will be noticed that Cases I., II., IV., V., VII., IX., and X., were cured at the first operation. Cases VI., VIII., and XI., at the second. Case III. after nine, including Bozeman's several times. These facts give us great encouragement to persevere, even in the most difficult cases, and show that no number of failures ought to prevent us from repeating our attempts.

Before concluding this pamphlet, I would wish to make a few remarks upon the originator of the metallic wire sutures. The evening previous to my reading these cases before the British Medical Association at Edinburgh, my friend, Professor Simpson, informed me that Mr. Gossett, of the city of London, had published, in the "Lancet" for 1834, the history of a case of vesico-vaginal fistula which he had cured by using golden sutures, and that he also recommended their use in many other surgical cases. The merit of being the first to

apply metallic sutures to these cases is therefore undoubtedly due to Mr. Gossett of London, and not to Professor Simms of New York. I must further add, however, that I attribute the rapid success of these operations to the use of the button, as first suggested by Dr. Bozeman, and that to him therefore is fairly due the merit of rendering this most troublesome lesion comparatively easy of cure.

THE END.

